



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,601	03/14/2004	Po-Chun Yang	ACMP0180USA	2600
27765	7590	12/06/2006	EXAMINER	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116				MASKULINSKI, MICHAEL C
ART UNIT		PAPER NUMBER		
		2113		

DATE MAILED: 12/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/708,601	YANG, PO-CHUN	
	Examiner Michael C. Maskulinski	Art Unit 2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 27 October 2006.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1 and 3-10 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1,3 and 6-10 is/are rejected.
 7) Claim(s) 4 and 5 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____

Final Office Action

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1,3, 6, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Rothberg et al., U.S. Patent 6,412,083 B1.

Referring to claim 1:

- a. In column 1, lines 53-60, Rothberg et al. disclose that present disk drive technology provides for EDAC (error detection and correction) to help prevent data loss (an application program containing an error checking algorithm in the electronic device).
- b. In column 5, lines 20-30, Rothberg et al. disclose detecting a defective sector in a file (starting the application program to access the application data, and executing the error checking algorithm to check for errors in the application data). Rothberg et al. disclose that the file may be a user data file or a user installed application file. Therefore, the file is application data stored in a section of the memory corresponding to the application program. Further, Rothberg et al. teach wherein each application program of the electronic device has a separate section of memory for storing application data since the file represents more than one sector and therefore a section of memory.
- c. In column 5, lines 20-30, Rothberg et al. disclose that for user data file or a user installed application file, the user is informed that the file has a 'defective

sector'. This may involve supplying the user with the name of the file containing the defective sector. The user is then asked if the file can be deleted and if the user determines the file is not needed, then the host computer deletes the file. Since Rothberg et al. disclose erasing the file including the non-defective sectors in that file, Rothberg et al. teach and erasing all of the application data in the section of memory corresponding to the application program when the error checking algorithm detects an error in the application data.

Referring to claim 3, in column 5, lines 26-35, Rothberg et al. disclose that a null value is written to the logical address and the disk drive performs the write and read verify operation, and then proceeds to other rescue-candidate locations (wherein the section of the memory is reset to an initial status after the application data is erased from the section of the memory).

Referring to claim 6, in column 1, lines 32-33, Rothberg et al. disclose a hard disk drive (wherein the memory is a nonvolatile memory).

Referring to claim 10, in column 1, lines 32-33, Rothberg et al. disclose that the electronic device is a computer.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colligan et al., U.S. Patent 6,298,443 B1.

Referring to claim 7, in column 1, lines 32-33, Rothberg et al. disclose a hard disk drive. However, Rothberg et al. don't explicitly disclose that the memory is a flash memory. The Examiner takes Official Notice that a flash memory is well known and to implement a non-volatile device such as a hard disk drive with a flash memory is well known. Examples of this include memories in PDA's, cell phones, digital cameras and other devices that are too small to hold a hard disk drive but require a non-volatile memory. It would have been obvious to one of ordinary skill at the time of the invention to use a flash memory in the system of Rothberg et al. A person of ordinary skill in the art would have been motivated to make the modification because a hard disk drive is not always practical especially in small devices. Further, storing and erasing of data is part of a flash memory just as much as a hard disk drive. To use a method for a hard disk drive with a flash memory requires nothing more than simple engineering and components.

Referring to claims 8 and 9, in column 1, lines 32-33, Rothberg et al. disclose that the electronic device is a computer. However, Rothberg et al. don't explicitly disclose a mobile phone or a personal digital assistant (PDA). The Examiner takes Official Notice that is well known to have computers or at least a processor and storage device in many different components. Examples include cars, kitchen appliances, large appliances, televisions, cell phones, and PDA's. It would have been obvious to one of ordinary skill at the time of the invention to computer system of Rothberg et al. in a cellular phone or a PDA. A person of ordinary skill in the art would have been motivated to make the modification because as mentioned above these devices contain at least a

processor and a memory. It would be obvious to extend a method for a computer system to these types of systems.

Allowable Subject Matter

5. Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments filed October 27, 2006 have been fully considered but they are not persuasive.

7. On page 4, under the section REMARKS/ARGUMENTS, the Applicant argues, "Thus, Rothberg only teaches deleting a single file and does not teach deleting all data within a memory sector corresponding to an application program, as is claimed in the currently amended claim 1. Rothberg does not teach separating application data corresponding to different application programs into separate sections of memory, and also does not teach deleting all data within a memory sector corresponding to an application program." The Examiner respectfully disagrees. In Column 5, lines 20-30, Rothberg et al. disclose user data files or a user installed application file. Each file is stored in its own separate section of memory. This is evident since the user is capable of deleting just one file. Further, Applicant's assertion that Rothberg does not teach deleting all data within a memory sector corresponding to an application program is incorrect. In column 5, lines 20-30, Rothberg et al. disclose detecting a defective sector in a file and deleting the entire file. Therefore the entire memory sector is deleted.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Maskulinski whose telephone number is 571-272-3649. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on 571-272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Michael C Maskulinski
Examiner
Art Unit 2113